

# Perceived Water Security for Northern Canadian First Nation Communities.

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## Water security:

Water is an essential part of life and viable sources of clean and drinkable water is a challenge for many people across the planet.

Unfortunately, this challenge exists for many First Nation communities across Canada as seen by a series of reports and investigations that have appeared over the last 30 years across the nation.

This research examines how members of two Dene First Nation Communities in Northern Canada perceive the degree of safety and security of their sources of drinking water, both within their homes and natural water sources.

## Participating Communities:

### Dene Tha' First Nations (DTFN): Northern Alberta

Consists of 3 communities

- 543 dwellings
- 201 homes on pressured water systems
- 339 homes have water cisterns
- 3 homes no services

- Community heavily dependant on Hunting and fishing activities and many members spend extensive time on the land.
- Extensive resource extraction (mainly oil) within their traditional lands since the 1930's and 40s that has had substantial impacts on natural water sources.
- Fairly strong timber industry activities including cutting and mills.

### K'at'odeech First Nations (KFN):

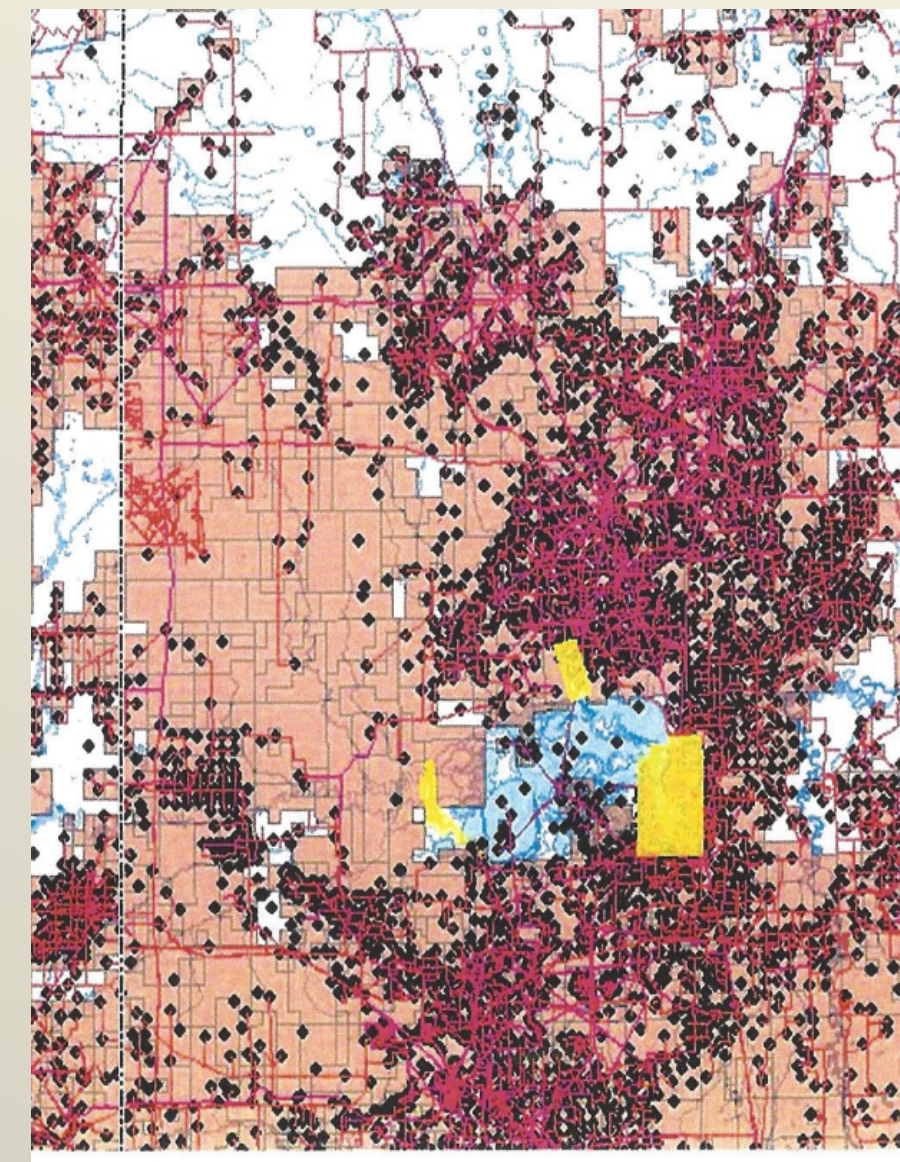
#### Southern Shore of Great Slave Lake – NWT

- Consists of 1 community with approximately 270 members
- All homes have water cisterns

- Community heavily dependant on Hunting and fishing activities and many members spend extensive time on the land.
- Limited resource extraction within their traditional land with little impact on natural water sources.



Meandering River Grotto Spring – thought as safe source of water by community members



Map of DTFN traditional lands – oil well locations.

## Methods

- Various members of communities participate in fairly short (20 – 30 mins) semi-structured interviews.

- Questions included:

1) Various personal information questions (Name, Age, Employment, Income, Education Level, English Proficiency, and contact information)

2) Various Questions designed to ascertain perceived degree of safety and security of the drinking water within their homes.

- IE –

- Where do they normally get their drinking water from.

- Do they drink tap water?

- Do they think it is safe?

- If not, what are their concerns?

3) Various Questions designed to ascertain perceived degree of safety and security of natural water sources.

- IE – Do they drink natural water sources?

- What sources do they consider safe?

- What sources do they consider not safe?

- What are their concerns about the natural water sources?

- Are they concerned about the future security of their natural water sources?

4) Various questions designed to ascertain if and how the interviewee brought forth their concerns and have they been addressed .

- IE – have they talked to the band council?

- Have they talked to the nursing station?

- Have their concerns been acknowledged? If yes – by who?

- How have their concerns been addressed?

•After the interviews have been conducted in both communities, the results will be analyzed and compared between the two to see the differences and similarities between this two First Nation Communities. Although 3 hours apart and both Dene Treaty 8 communities, the various historical impacts on these communities may make the results distinctly different.



Cleaning of Drinking Water Cisterns

## Initial Findings: DTFN

In Aug 2016, 49 interviews were conducted within the three communities of the Dene Tha'.

The initial results indicate a few definitive conclusions:

For tap water sources.

- Majority of households that have cisterns do not drink water nor do they think it is safe to drink.
- The Majority of households on pressurized system think tap water is safe and a percentage of them drink it regularly.
- Vast majority of all households interviewed (over 90 percent) buy and drink 5 gallons jugs of water as their first choice of drinking water.
- Biggest concern for tap water is dirty cisterns, the hardness of the water, and the test of chlorine.
- Degree of security and sense of safety of the tap water is directed related to being on pressured system or having a cistern.

For Natural sources of water:

- Majority of people still drink water from natural water sources while on the land hunting and fishing.
- Younger and people with higher levels of education people are less likely to think natural water sources as safe.
- Natural springs, muskeg water, rain water, snow and ice water are considered to be safe by most interviewees.
- Moving water is considered more safe than still water.
- Degree of security and safety of natural water sources is related to fears of oil spills and contamination, and pollution from local lumber mills.

Research findings for KFN – TBC – mid March.

Sources:

<http://denetha.ca/about-us/>

[http://www.dehcho.org/members/hay\\_river\\_reserve.htm](http://www.dehcho.org/members/hay_river_reserve.htm)



Chateh Hill Spring – Natural Spring that once played an important part in Community as viable water source.